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PRACTICAL MEDICINE AS A SCIENCE.

The Annual Address delivered before the Norfolk Dist. Med. Society, May 11, 1870, by ROBERT T. EDES, M.D., Boston.

MR. PRESIDENT AND FELLOWS,—Our profession is now, as it has been for centuries, subject to the attacks not only of the ignorant, but of the learned, who reproach us with the incompleteness and uncertainty of our science and the inefficiency of our art.

The New York *Nation*, for instance, which claims to represent the highest culture of the country, administers, with the air of one superior to all such petty disputes, a dignified reproof to a medical association for refusing to recognize a particular class of charlatans, on the ground that in the existing uncertainty their theory may perhaps be the true one and preferable to that of their persecutors.

A member of our State Legislature wishes to abolish the State Board of Health, as of no practical value, because what is regarded as true in medicine one day may be abandoned as false on the next, while on precisely the opposite side the whole army of quacks proclaim in loud accord to the admiring public, agreeing in this as in nothing else, that the "old-school doctors" bleed and purge and give calomel with the same vigor and persistency that they have done from time immemorial, and are utterly incapable of perceiving the new truths so disinterestedly proclaimed in long columns of the daily papers. We have also perhaps suffered somewhat, though with sensible people but little, from some overstatements of facts which are now quite generally received by the best part of the profession.

Let us begin by admitting the partial truth of some of these objections. Let us confess to one class that we do take counsel of the wisdom of the ancients, to another that our views do change, and to another that medical theories are very uncertain affairs, and to our own recollections that we do make mistakes. We only say thereby that man is neither omniscient nor infallible. It is, however, and I say it not as a mere retort, but to show that this state of things is not due to want of zeal nor of intelligence on the part of the cultivators of medical science, very much the same in many or most other departments of human knowledge which have a practical bearing on the actual affairs of life. There is no pursuit requiring thought, knowledge and judgment in which a reflecting man, no matter how great his attainments, must not feel the very narrow limits beyond which his utmost endeavors can never carry him, when he sees the infinite number of things still to be known.

It was not the deficiencies of our art alone which impressed Faust with the insignificance of his study when he said—

> I have now, alas! quite studied through
> Philosophy and Medicine
> And Law, and ah! Theology too,
> With hot desire the truth to win!
> And here, at last, I stand, poor fool,
> As wise as when I entered school.

Uncertainty and change affect all the great objects of human interest.

Theologians are not as yet in entire harmony with each other, and the gulf between Catholicism and ritualism on one hand and radical theism on the other is certainly as wide as any which can be found in the limits of legitimate medicine, while the various forms of religious eccentricity may find a parallel in almost every respect in the numberless "pathies" so prevalent at the present day. Social and political evils of various character afflict the community, upon the remedies for which legislators and philanthropists, though working with the best of purposes and the utmost zeal, do not agree.

It might seem, for instance, as if the financial condition of the country were sufficiently under the control of our government, and the laws of trade sufficiently well understood, to enable measures to be taken which should with regularity and certainty put our business relations on a firm and reliable basis; but we see session after session of Congress go by without agreement upon any fixed plan, and even

when a more favorable state of affairs seems approaching, there will probably be just as little agreement among the financially learned as to the means by which it shall have been brought about.

We must acknowledge that the legal profession is often able to announce its decisions with greater certainty than we can always do, but the comparison is not in all respects a fair one, for the lawyer has merely to bring his case to correspond with certain conditions already authoritatively laid down, while with the justice or expediency of the law he has in his professional capacity but little to do. There would be, I suppose, but little difference of opinion among lawyers in any given case as to whether a man were guilty or not of violating the prohibitory law for instance, while they might, and probably would, hold the most various views as to the wisdom or propriety of enacting such a law. If all that were required of *us* were to fit each case to a certain nomenclature depending on certain arbitrarily chosen symptoms, our task would be comparatively an easy one; but this would be of but little use for practical purposes, since we must, to cure our patient, go beyond the name of the disease, and examine his condition and the nature of his malady. I think we may fairly claim that no other art has to deal with more complicated, obscure and variable conditions than ours; and these very difficulties, which make its enlightened practice a problem sometimes too difficult for the soundest minds in our profession, when joined to imperfect knowledge and that incapacity for impartial judgment which deep personal interest is so liable to produce, also render the general public still less able to justly appreciate what is done.

Having thus briefly, but as I trust thoroughly, made our confession and apology, let us look upon the other side of the question.

There is no doubt that the last and present centuries have seen an advance in general science entirely unparalleled in the annals of the world. It was in the latter part of the last century that chemistry became a matter of exact and systematic observation instead of an incoherent mass of crude theory and isolated experiment, while it is almost entirely in the present that geology and zoölogy, with all their allied branches, have assumed a definite form. It may at first sight appear that the medical sciences, or more properly speaking practical medicine, have by no means shared in the advancement, and that the art of the present day has much the character of that of our ancestors, though differing in form. In some respects we *are* but little in advance of them, for many of them were most excellent observers of disease, and their description of symptoms as good as can be written.

It has been very truly said that all knowledge passes through three stages: first, the certainty of ignorance; then, the uncertainty of doubt and inquiry; and, lastly, the certainty of real knowledge.

Portions of many sciences have now reached the third stage, but until the whole mystery of creation is revealed to us another portion must still remain in the second; and this portion is to the former infinitely great. Even in chemistry, for instance, where the amount of well-ascertained facts is immense, and many of its theories, if not proved true, are yet sufficiently near the truth to be of great practical value, consider how vast a domain is yet imperfectly explored in the region of organic bodies. While geology proves beyond the shadow of a reasonable doubt the vast antiquity of the world, and is able to construct before our eyes the fauna and flora of bygone ages, yet how much still remains in dispute or utterly unknown, and what different theories still are held on the most important points!

The various branches of medicine are in different parts of these three stages. While we HOPE that all of them are beyond the first, we can hardly be sure that it is so, when we see how much is assumed upon mere assertion, and believed because it has never been contradicted. The story may be true in spirit if not literally, of the doctor who said he had never read but one medical book, and he was sorry for that, for it had disturbed his mind. In most minds, however, we may consider medical knowledge to be largely in the second stage—that of inquiry and investigation. All our old beliefs are receiving a thorough overhauling, some rejected, some patched up and refitted, and others found still sound and serviceable. The present time is certainly an age of skepticism, using the word in its best sense, of all kinds, including medical and religious; and though this spirit may try the souls of men who must do something, wish to do right, but cannot determine what the right is, yet it is far richer in scientific fruit and produces far greater results, both practical and speculative, than could come from ages of dogmatism and traditional authority. To apply these thoughts to our own daily labors, we

may envy the feelings of the man who is always sure he is right, but we can hardly congratulate his patients.

Let us glance at some of the branches of our science. Descriptive Anatomy nearly reached its limits many years ago, and the most that is now expected of it is the discovery of some anomalous muscular slip to compare with the structure of inferior animals, some slight modification of old views, or rearrangement of old data. The plates of Albinus are almost as good to dissect from as any of the modern books, so far at least as bones and muscles are concerned.

The microscope, however, has opened for us a new world. It is this instrument alone which could have given to physiological anatomy and to pathology the capacity to make the enormous advances of the last few years. Without it we should have known nothing of the cell structure with its modifications, on which, in one form or another, so large a part of our pathology depends. Our knowledge of the nature of many changes occurring in disease is almost wholly due to it. Very important practical examples are to be found in Bright's diseases, and in some of the more recently recognized diseases of the nervous system.

It is said, and with much truth, that both the scalpel and the microscope give us but the results of morbid processes, and do not reveal the actual working of disease, just as we could form but little opinion as to who set the fire, by looking at the pile of bricks where the house stood. Results, however, if carefully examined and compared, *do* throw great light on the manner of their attainment, and show us at least what it is that we should try to prevent. But here we have other help. Chemistry, which of all the applied sciences, except astronomy, is the most exact, has long busied itself, not alone with the ultimate analysis of tissues, but with watching the excreta, and informing us of their changes in health and disease. Here, too, we deal with results rather than with the actual processes, but we have gained most important data for solving the complicated equation of disease, which involves so many unknown quantities. The chemist tells us what comes away, the anatomist analyzes what remains, when the disease is fatal, while the clinical observer, watching the whole process, constructs from all the data a theory of the disease which shall be a guide to future investigations, and a sound basis for a rational treatment in similar cases.

Another branch of inquiry, from which we have received much, and may expect more, of practical value, is experimental physiology. Bernard and Brown-Séquard have shown how two important diseases, diabetes and epilepsy, can be counterfeited in animals by injuries to the nervous system, and many other observers have filled in more or less of the missing links in the chain of causation, and have shown the bearing of these facts on human pathology. The knowledge of the action of drugs has received most important additions from this source.

Can it be that, with all these helps, the more practical branches of medicine have stood still, and that we are yet blindly led by tradition, or afloat in an ocean of doubt and speculation, where we can see no light nor beacon?

It is not alone in physiology and pathological anatomy that we perceive the improvement due to the modern means of exact investigation. The common and extending use of instruments of precision furnishes us with many data which before were only approximated, though often with considerable accuracy. The great art of physical exploration throws an entirely new light upon a large class of diseases, and now we see with our fingers and ears where before we could only guess. The thermometer gives a precision to estimates of temperature which renders this symptom of much more value than when simply judged of by the hand, not only for diagnosis and prognosis, but for appreciating the effects of treatment, or as a therapeutic indication.

The ophthalmoscope, besides its use in its own proper place, brings us one step nearer to the brain, and the laryngoscope to the lungs, while the microscope and test-tube aid in diagnosis, as in pathology, by their critical analysis of the excreta.

I think, however, that, in addition to the advantages derived from instruments of precision or of power, which medicine shares with almost every other branch of knowledge, the great gain is to be found in improved habits of thought, for, after all, science is not in the instrument, but in the user of it. The present age is, as we have said, one of skepticism, but skepticism does not mean disbelief. We have rejected the systems and theories of our ancestors and are to reconstruct our science, as we hope, on a new and firmer basis. We may use their material, but the plan must be a new one.

The most important fact, whose general and popular recognition is of quite recent date, is this: that many diseases run a definite course, influenced but little by remedies as regards their duration, and often get

well of themselves. It is unnecessary to insist on the importance of this fact, suspected and hinted at for a long time by some of the best minds in the profession, but only lately generally and practically acknowledged. It has been too often and too thoroughly treated here and elsewhere, and is too generally accepted as the truth, to make any words of mine other than superfluous. If it should ever be shown that any or all of these diseases can by any means now unknown be cut short, or materially modified, it would not in the least affect the scientific position of this fact, however much it might diminish its practical importance.

This, however, though the only sound starting-point, is not the whole of therapeutics.

If all rational medicine can do is to make its diagnosis, and then stand by with folded hands until the disease wears itself out, to end either in recovery or death, then either is our function trivial and silly, or our art is a meditation upon death. Too often we are, it is true, obliged to confess our inability to do aught but watch and wait, but to do that, ought to argue a belief on our part that when the time comes we can interfere to advantage.

How great our control may become is one of the unsolved problems; but even in the most strictly self-limited diseases, we know of one, at least, where artificial interference is of the utmost possible value in prevention or modification of its severity. The efficacy of vaccination is fortunately a subject on which none but the very ignorant, or some hobby-riding enthusiast, can entertain a doubt. In others of this class we are to be sure less fortunate, but there can be no essential difference pointed out between the variolous diseases and the others, to show why something analogous might not take place in regard to them, while their strong similarity, in many important particulars, affords a well-grounded hope that we shall not always be so often called to confess our impotence in the presence of other malignant fevers. In regard to other diseases self-limited, to be sure, but less definitely so, if we cannot cure, which is by no means fully proved, it is very possible that we may reduce their duration and risk to a minimum.

I remember seeing in a comic paper, in one of the great European medical centres, a picture of a little boy with his father quietly watching a girl drowning, while beneath was to be read something like this: "The little Matthias was allowed to go to walk with his father, and, as they were walking, suddenly a girl sprang out of the hedge into the pond to drown herself. 'See!' said the father, instructively, 'this happens either from love or misery, or because some crime weighs upon her mind. See how slowly she goes down.'"

If I had possessed the skilful pencil of one of our number, I should have been sorely tempted to change the father's face to that of a distinguished professor in the great hospital of that city, the little Matthias would have multiplied into an admiring crowd of medical students, and the girl would have been a patient over whom the professor was delivering a clinical lecture.

It seems to me that the prevalent tone of feeling in regard to therapeutic measures, and especially, let us not try to disguise an offensive phrase, the use of drugs, is just as unreasonable and unscientific, and as much dependent on prejudice and fashion, as the former belief in overdosing. It is, to be sure, a much less dangerous error, for we must confess that the possible harm of drugs is greater than any possible good, but we are not obliged to choose either alternative. But few enlightened practitioners of the present day choose the older method, although sensational writers, for the sake of pointing an epigram, and quacks for profit, persist in attributing such malpractice to what they term the "old school," while those who, if they adhered to their principles, would really give nothing, are more than suspected of frequently using very appreciable doses.

We say much about leaving diseases to nature, but it is not so easy to say what nature is. We certainly do not mean by that phrase that patients do better if altogether neglected and left to do as they please. Instinct is often a good guide, not, however, to be too implicitly followed, but often itself guided.

It is but a narrow and arbitrary view which excludes from the catalogue of natural agencies, the efforts of the physician, or any means he is able to make use of. Whatever we may do, we *cannot* take the patient away from nature, and our task is so to control those influences which *are* in our power that those which are *not* may do the least harm.

To exclude those agents which their enemies call drugs, and their friends medicines, is also an artificial distinction, which often rests on no better basis than perhaps a disagreeable taste, or the fact that they are bought of the apothecary instead of the grocer.

It is impossible to draw a line which shall separate some drugs from some articles taken with our food, and forming part of the body. Wheat flour is undoubtedly food, and iodide of potassium as undoubtedly a drug; but what of chloride of sodium, as necessary to the body as flour, but chemically much more closely allied to the iodide?

Scurvy may be cured by oranges, which are pleasant food, by raw potatoes, which are food, but said to be extremely disagreeable, or by citrate of potash, which is a drug, but not a disagreeable one.

If saturating a man with lead gives him colic and paralysis, why should not removing that lead by chemical means be an important part of the cure?

We find in the body many definite chemical products, some of them capable of being produced artificially, and others only within a living organism; some of them having uses in the vital actions of the body, and others, when in excess, producing, or accompanying, disease. What is more reasonable than to suppose that these may be affected by other chemical agents introduced from without? We do not, to be sure, know the poisons of many diseases, but we may not always be ignorant either of them or of their antidotes.

I do not make these suggestions as in themselves arguments in favor of using drugs, but to show that no *mere theory* should *prevent* our using them, and that the question of their advantages or disadvantages should be, like all questions of practical medicine, brought to the test of actual observation and submitted to unprejudiced judgment in each disease for itself.

If real, carefully observed, and as carefully criticized experience shows any drugs to be useful, let us use them and be thankful for them, uninfluenced by tradition, or by fashion, and let us be just as ready to refrain, if we have reason to suppose that they do harm. Questions of therapeutics, whether as to drugs or diet, or other influences, should be investigated in just as dispassionate and unpartisan a spirit as those of diagnosis or pathology.

This is not an occasion for a treatise on special therapeutics, but there are, as I think, some facts in regard to drugs so well established that they ought to be regarded as forming contributions to science. It is a great comfort to any one who would like to believe that his art is something more than good nursing, to have become familiar with one drug which is almost certain to produce decided and eminently useful specific effects, and the indications for whose use are clear and precise. Such a drug is quinine. Sometimes, possibly, doing harm by too free a use, but often unjustly blamed for effects that do not belong to it, and sometimes depreciated by those unfamiliar with its use, its beneficent power cannot be doubted or undervalued by any whose fortune it has been to practise in malarial regions. Even in this neighborhood, where we have less occasion to call for its *specific* effects, I think it will become more used than at present, and will perhaps be better appreciated as practitioners cease to fear a large dose. Its value in malarial fevers, however, is an accomplished fact in science.

Among the more commonly used remedies are some to which almost all practitioners resort, and which have in their favor not merely the testimony of those who have seen some individual cases recover after their exhibition, for this happens with all drugs, and all modes of treatment, however absurd, but the almost unanimous voice of the most distinguished physicians all over the civilized world. Such, for instance, as cod-liver oil, iron and iodine, and many others of less general application, but useful in special cases, or for special symptoms. Some, if not all, of these are often resorted to, under one pretence or another, even by those who boast to have specifics of an entirely different character for every disease. The indications for their use are clear, and their effects tolerably certain.

Of the large and increasing class of medicines whose primary action is probably on the nervous system, and indirectly on many other portions of the organism, our practical knowledge is extensive, but not complete, while, in regard to the mode of their action, we are beginning, and only beginning, to get more precise notions. In this direction, clinical observation, though a valuable adjunct, can never advantageously take the lead. This is to be done by laborious and careful physiological experiment, such as we have an example of in the researches of a member of this Society on the bromides and other neurotics.

Beside the more obvious indications for the use of anæsthetics and narcotics, which are, perhaps, quite as exact here as in any department of medical science, the usefulness of this class of medicines seems likely to extend much beyond the neuroses to many diseases of abnormal nutrition, dependent on abnormal innervation; and these diseases are by no means few. Many experiments have shown how great an influence is exercised by the nerves over the

secretions, and pathological facts have also shown their effect upon nutrition in general. Probably this takes place by means of the nerves which control the circulation, both the energy of the heart and the calibre of the bloodvessels. These facts, as well as many of pathological anatomy, point in this direction as likely to be in the future a rich field for investigation in the action of drugs. In many cerebral diseases, the marked immunity of the nervous elements proper, as distinguished from the changes, first, of the bloodvessels, and, secondarily, of the connective tissue, the evidence, in chronic cases, of long-continued congestion of the cerebral vessels, and, in recent cases, sometimes the absence of any lesion discoverable after death, and sometimes the presence of mere acute congestion, explain the good effects shown by observation to be obtained by agents which influence the circulation, or which call more blood in another direction, and also lead us to hope that the control may be sometime more complete.

Beside many agencies, of which the uses or a part of the uses are well established, there are many others, either just coming into notice, whose value is not yet well determined or generally appreciated, or else concerning which the prejudices have been so great and the warfare so hot that a really unbiassed judgment is not easy. It is, perhaps, in regard to bleeding and mercury that the "currents and counter-currents" run more strongly than anywhere else. The present reaction against excessive venesection and depletion can hardly be wondered at when we know, either by observation or reading, the state of things which preceded it. The counter-reaction, which seems to me not so very far off, will not carry us back to the old fashion, but will approach more nearly to a legitimate and rational employment of a powerful remedy, instead of a routine use, or almost equally routine neglect.

The whole plan of counter-irritation has been receiving a thorough discussion lately in some of the periodicals. It is certainly very easy to show the absurdity of irritating or depleting applications to the walls of a cavity with a view to withdrawing blood from the contents, which are supplied from a different set of vessels. I remember seeing an autopsy where an internal strangulation of the intestines had just been disclosed. The operator quietly laid the abdominal walls back into place, and, saying nothing, pointed to the marks thereon of three leech-bites corresponding in position to the lesion below. Comment was unnecessary.

It would be very difficult, however, to convince either practitioner or patients, let us destroy all the theories as completely as we may, that relief from pain, if nothing more, is not very apt to follow the application of so-called counter-irritants.

An explanation is not necessary to our present purpose, since if the facts are wholly or partially established, we may make present use of the knowledge, fitting them in with former theories afterwards at our leisure. We may, however, mention, as furnishing, if not an explanation, a physiological analogy to these facts, certain recent experiments. I refer to those of Brown-Séquard, who has shown how the temperature of one hand may be reduced by placing the other in ice-water, the reduction being too great and too rapid to be accounted for by the cooling of the whole mass of the blood; and others where an alteration of temperature was produced in the limbs (Brown-Séquard and Lombard) or the nervous centres (Schiff) by irritation of sensitive nerves. Also those of Dr. Mitchell, who found that by freezing certain portions of the skin in pigeons very curious nervous symptoms were produced, nearly corresponding to those due to irritation of nerve centres. Most curious of all, if the crop of a pigeon were frozen by the ether spray, he continued to walk to the opposite side for five or ten minutes, as if his cerebellum had been treated in the same way. All these observations, as well as many facts of reflex influence, both experimental and clinical, go to show that the effects of counter-irritation are to be explained by nervous action. The subject, though very interesting, is far too extensive to be treated or even fully illustrated at this time.

Regulating the temperature by direct application of cold and heat to the body is a means of treatment which is yet to receive more extensive and also more exact and systematic application; and the same may be said of the different qualities of the galvanic current, an agency which is fast assuming a position of the greatest importance in the treatment of nervous diseases, and possibly organic also.

There is somewhere a perfect system of therapeutics. It is not *necessarily* a system which has a cure for every disease, for there is no reason to suppose that such exists; but in each case there is some one course of treatment which is the best possible, and which does for a patient all that could pos-

sibly be done. What this is, is for us to try to approximate as much as possible by observation, and as little as possible by theory.

In the present state of our knowledge at least, it is often merely to feed, ventilate and rest the patient, and let him otherwise alone. Often, however, many symptoms need regulation, some of which we can control with ease and certainty, others only by trials, and with difficulty, and others not at all. In still another class, I believe that we really cure the patient in the old-fashioned, popular acceptation of the word; or if we cannot cure, materially retard the progress of a fatal disease. To accomplish these objects we have a right to use *all* or any of the means which nature spontaneously affords or which men can wring from her.

I am aware that mention has been made of but few of these means, but my object was rather to illustrate than to prove. Surgery and some of the specialties would furnish many arguments to show not only the practical progress which has been made in the healing *art*, but the real advance of the *sciences* of pathology and therapeutics.

The importance of the knowledge of hygienic agencies has been but little dwelt upon, not because undervalued, but because universally understood and admitted.

If I have in this sketch mingled too intimately views of the present state of our science with expectations for the future, it is because this way of viewing the subject corresponds so closely to what we have to do in the practise of our art.

Every case occurring to ourselves must not only be treated with all the judgment afforded by our present knowledge, but from it and from comparison with the experience of others, we gain information for future use. None of us can stand still, and we must not only learn for ourselves, but be willing to contribute to the common fund of knowledge whence our science is to take the material for its growth. If, as I have endeavored to show, there is such a thing as medical science, as well as medical art, and if we can claim a certain amount of exact knowledge displacing conjecture, we must, nevertheless, admit that science is still imperfect, and that we cannot foresee how vast may yet be its increase.

The Academy of Medicine has refused to strike off the names of their eminent German colleagues from their *roll*. It has adopted patriotic resolutions, and protested against the shelling of the hospitals, museums, &c., of Paris and other large towns.

Selected Papers.

SEPTICÆMIC AND PYÆMIC FEVER.

By Prof. Hueter, of Kostock, A Résumé by Prof. Podrazki, of Vienna. Translated for the Boston Medical and Surgical Journal by J. C. Warren, M.D.

(Continued from page 210.)

With regard to the etiology of pyæmic fever, the author mentions, first, the conditions under which the pyrogenous substances enter the circulation from abscesses, and then the conditions under which thrombi form, undergo purulent softening, break up and reach the circulation, i. e., the etiology of pyæmia simplex and that of pyæmia multiplex. In the former case, the lymphatics play a part similar to that which they take in septicæmia, only that in this case (septicæmia), the conditions for the reception of septic substances into the lymph channels are incomparably more favorable than the reception of purulent substances in pyæmia. For, at the time that suppuration has begun, the openings of the lymphatic vessels are, for the most part, closed by a growth of tissue, as has been particularly shown by Billroth.

In the development of vein thrombi, the general condition of the circulation is of great importance. In such cases, therefore, a great loss of blood, wound fever (septicæmia), accidental complications like bronchial, gastric and intestinal catarrhs, pneumonia, &c., constitutional disease, and, finally, the age of the patient, exert an important influence. It is a very remarkable fact that pyæmia multiplex very rarely occurs in extreme youth, which is probably due to the more energetic action of the heart.

Finally, the author rejects the so-called "pyæmic poison," which is said to cause pyæmia in virtue of its zymotic properties, which theory was brought forward and for a long time defended by Roser. He rejects it, because, in his opinion, it is not necessary to adopt a name, about which we know nothing, like "pyæmic poison," or the "zymotic poison of pyæmia."

Among the group of symptoms of pyæmic fever, chills are considered as the most important, and have always been looked upon as particularly characteristic in the development of this disease. The very interesting and valuable labors of Billroth on this subject, and also on the condition of the temperature, are given in full detail. The observation of the changes of temperature,

which is a still more important symptom than the chills, offers a much safer guide, not only for diagnosis, but also for the prognosis.

The sympathetic affection of the central nervous system is manifested in a very peculiar manner, and quite differently from what occurs in septicæmia.

Delirium is here much more rare than in septicæmia, but the great mental depression of a pyæmic patient is very striking.

Diarrhœa accompanies pyæmia quite often, also enlargement of the spleen. Albumen in the urine renders the prognosis less favorable. The author mentions the interesting fact that the suppurations of joints, which occur in pyæmia very frequently, are not accompanied by any pain, so that the patients do not even allude to them, while the acute suppurations of joints dependent on other causes are so extremely painful.

The opinion of Billroth is brought forward, that pyæmic and septicæmic fever occur most frequently from February to July, most rarely from August to January. May and June are considered the worst months. The predisposition of compound injuries of the bones to complications with pyæmia is shown in the most striking manner by the statistical observations of the same observer.

According to the author, pyæmia multiplex is on the whole not an absolutely fatal disease: it is very rare, however, that one can say with any certainty that a patient affected with pyæmia has recovered, for it is seldom that the diagnosis can be determined beyond a doubt without the aid of an autopsy. Unfortunately, such is the case, although he who considers a mere chill as a sign of metastatic pyæmia can point to many a cure. Hueter reckons the proportion of cures to be about one in fifty.

The last chapter of this monograph—the treatment of pyæmic fever—is written in a very attractive manner. It must naturally be somewhat similar to that of septicæmia, where, as well as here, the treatment can only be prophylactic and palliative. * * * * We decidedly agree with the author in condemning an indiscriminate praise of conservative efforts, which have sacrificed many a patient to pyæmia, whose life might have been saved at the expense of a limb. He is also strongly opposed to the practise of allowing an abscess to "ripen" until "nature" shall have made a way for herself.

The statement of Hueter, that he has opened dozens of psoas abscesses, connected with osteo-myelitis of the vertebræ, with the knife, without a single unfavorable result, is certainly very astonishing. It may be possible that I have not caught his meaning, for it does not correspond to the experience of other surgeous. We have opened many a psoas abscess in von Pitha's clinic, taking every possible precaution, and yet, in the majority of cases, have observed an increase of fever and the occurrence of chills. * * * *

Although the author does not believe in pyæmic poison in the form of a miasma or contagium, and consequently rejects endemic and epidemic pyæmia, yet he expresses himself as very decidedly opposed to any crowding of patients with serious wounds, on the ground that putrefactive processes may be transmitted from wound to wound. According to the theory of the character and development of pyæmia, which is now pretty generally accepted, it is not necessary to assume a miasma or contagium, yet there are so many phenomena in this fearful disease which are not yet satisfactorily explained that it hardly seems possible to be too cautious. The most complete isolation of such patients should therefore be maintained, if circumstances permit.

Under the head of radical treatment of vein thrombi is mentioned, 1st, ligature of veins; 2d, amputation. The author recommends ligature of veins, which has been tried twice successfully by Lee. If, for instance, a patient with an injury of the hand has a chill, and a thrombus is found in the vena cephalica which reaches beyond the elbow, the vein should be tied above.

Schuh has maintained that amputation can save the patient after pyæmia is already developed, and Billroth and others have observed undoubted cases of this sort.

Our last refuge is transfusion (Lücke). The author recommends this in combination with amputation.

Potash and nitrate of soda, the mixtura nitrosa and the mineral acids are mentioned among the anti-pyretica. Their value is very doubtful. The sulphates are recommended by Rolli both for septicæmia and pyæmia. Whether quinine does any good in large doses beyond a slight depression of the temperature and retardation of the chills, I should also be inclined to doubt. It will nevertheless probably maintain its position in the treatment of pyæmia for a long time, for we have no other remedy, and yet we must give the patient something! The narcotics are undoubtedly useful in relieving symptoms, particularly subcutaneous injections of morphine. It relieves the patient from pain, and enables him to forget his troubles in sleep.

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED BY F. W. DRAPER, M.D., BOSTON.

THE Society met March 25th, Dr. G. H. Lyman presiding.

Dr. F. Gordon Morrill exhibited a *post-mortem* specimen of colloid cancer of the omentum. The patient was a man, 75 years of age, who, during the last six months preceding his death, had suffered pain in the epigastrium, loss of appetite, and occasional nausea. During the last month of life there was ascites. The tumor could be indistinctly felt through the abdominal walls. The patient was confined to bed only two weeks.

At the autopsy, the omentum was found to have become degenerated into a mass of colloid cancer, occupying the whole anterior part of the abdominal cavity. In the liver were a considerable number of small nodules, having the physical characters of cancer.

Dr. J. B. S. Jackson remarked upon the general appearance of the growth as being distinctly characteristic. He stated that the omentum was specially the seat of this form of degeneration, the ovaries and stomach presenting it next in frequency.

Dr. Fitz described the microscopical character of the disease as consisting of alveoli, whose fibrous stroma contained cells presenting nuclei and granular contents.

Dr. Marcy, of Cambridgeport, exhibited to the Society a specimen of double monster, delivered, still-born, at full time, and read notes of the case, describing in detail the process of delivery, and the external appearances of the fœtus. The paper, together with the report of the anatomical section, by Dr. Fitz, to whom, by the vote of the Society, it was referred, will shortly appear in this JOURNAL.

Dr. Jackson remarked that the present was the fifth or sixth case of its kind occurring in this vicinity. In such instances of abnormal development, there is a single heart composed of the various cavities of two hearts indistinctly fused. The livers are also coalescent. The other organs, he believed, were generally distinct and complete. The sex is the same. The recovery of the mother with speedy convalescence is the rule, as exemplified in the present case.

Dr. Fitz exhibited a tuberculous kidney recently removed, *post mortem*, from a patient who had died from general tuberculosis. The lungs, however, showed the cheesy degeneration of pneumonia, and presented only doubtful evidence of tubercular deposits. The liver, intestines and bladder were tuberculous. In the mucous coat of the pelvis of the kidney, and of the Malpighian pyramids, gray, tubercular granules were seen. There had been no urinary symptoms.

Dr. Jackson showed two placentæ very beautifully injected by Hyrtl, of Vienna. He remarked, incidentally, that the general rule laid down by Hyrtl that where twins are contained in a single amniotic sac their sex is the same, and when in separate sacs their sex is different, had been refuted by numerous observations to the contrary in this vicinity.

Dr. H. W. Williams referred to four cases, occurring recently, in which he had diagnosticated Bright's disease of the kidneys by the characteristic changes in the retina, as discovered by the ophthalmoscope. One patient, who had first consulted him in January last, for failing vision, and who had not previously presented the symptoms of renal disease, showed retinal changes which were fully corroborated by the condition of the urine then for the first time discovered; death occurred two months later from Bright's disease.

Dr. W. did not regard the degeneration of the retina as especially belonging to the early stages of the disease, yet it was not infrequently the first symptom discovered.

Dr. Ayer related the history of a case recently under his care. One year before death, the patient, a young lady, had fallen with considerable violence, dislocating her wrist and severely jarring her body in general. Subsequently dysphagia developed so that only liquid diet could be taken. The probang passed to the lower third of the œsophagus and came upon a dilatation, but would not enter the stomach. One month before death, paraplegia occurred. In spite of all attempts to nourish the patient by means of nutritive enemata, oleaginous inunction and other measures, death occurred from inanition. There was no autopsy.

Dr. Bowditch said he had recently performed thoracentesis on a patient presenting the physical signs of pleuritic effusion, but in whom the intercostal spaces were not distended. Two pints of fluid were withdrawn. He believed it a good general rule not to tap unless the intercostal spaces were obliterated. He remarked upon cer-

tain cases of latent pleurisy, in which the symptoms were referred chiefly to the stomach, but examination of the thorax discovered a large effusion.

Dr. Johnson said he had recently had a case whose symptoms simulated in all respects delirium tremens; it had occurred in a man who had taken no alcoholic drink, but who had used tobacco inordinately.

Dr. Bowditch believed the intemperate use of tobacco to be a prolific source of functional disturbance of the heart and nervous system.

Dr. Williams said it was also a cause of amblyopia. Total abstinence in such cases was followed by recovery.

The Society adjourned.

MIDDLESEX SOUTH DISTRICT MEDICAL SOCIETY.
CHARLES E. VAUGHAN, M.D., SECRETARY.

THE annual meeting was held at Waltham, April 19th. The officers for the coming year were elected, as heretofore reported.

It was unanimously voted that the Society send no delegates to the coming meeting of the American Medical Association.

The committee appointed at the semi-annual meeting to consider Dr. Sullivan's protest against the action of the Councillors of the State Society in October last, reported that in their opinion there is no just cause for objecting to the course pursued by the Councillors, and recommended that the Society take no action.

A paper was read by Dr. C. B. Shute, of Malden, upon Medical Education. The state of medical education contrasts favorably with that of twenty-five years since, but is still deficient.

I. An initial examination is needed, more than a final one, to ensure a proper mental discipline prior to the practical medical training.

II. The medical school should be graded like other schools, each year having its appropriate studies, with an examination at the close of each year. This would remove a source of confusion to the student and of embarrassment to the profession.

III. Professors should not be dependent upon the number of pupils, but should have fixed salaries.

IV. Clinical opportunities might be improved. Students should be allowed to visit the hospitals in small clinical classes of six, who are to follow and discuss a given case, as pneumonia, throughout its course.

Practical opportunities in surgery and obstetrics are especially needed.

V. Instruction should be given by judicious intermixture of recitations and lectures.

Dr. H. O. Marcy reported a case of delivery of a twin fœtus, or double monster, with a drawing of the fœtus. The union was from the clavicle to the umbilicus. Dissection showed a double heart. An account of the case has been reported to the Boston Society for Medical Improvement, and will appear with the records of that Society.

Dr. S. H. Hurd read a paper upon Medical Knowledge among Indian Tribes, in which he reached the conclusion that we are not likely to add much of value to our Pharmacopœia from theirs, and that "Indian doctors" are not the most reliable practitioners.

The average length of life among our Indian tribes has not been great within our acquaintance with them, and probably not before. This is owing to epidemics, accidents, &c. The use of the vapor bath was mentioned. Among medicinal herbs, Dr. Hurd specified beth-root, or trillium, used with the unicorn plant as a cataplasm; decoction of mulberry leaves externally in orchitis; solidago; clover in decoction externally in ophthalmia; sarracenia purpurea in variola; actæa nigra as expectorant and cathartic.

Dr. Hurd said that in a recent attack of rheumatism of considerable severity, he had derived much comfort from a simple form of vapor-bath which originated among the Indians, and which he exhibited. The internal use of lithia was also beneficial.

Dr. Morrill Wyman spoke of an acute affection of the hip, of which he has seen several cases. It is characterized by intense pain in the region of the joint and down the thigh, with tenderness over the joint, high febrile action, with delirium, more or less œdema, and very rapid course.

The first case was a girl of 12, who died on the 5th day. On examination, the hip was found swelled, and the tissues infiltrated with serum. On cutting into the capsule, in front, thick, greenish pus gushed out. The head of the femur was denuded of cartilage on the anterior surface; at the insertion of the ligamentum teres, and in the ligament, was injection of blood. The head opposite the margin of the acetabulum, and the margin itself, were roughened.

The second case, of an Irishman, was fatal in five days. No examination. Sir B. Brodie mentions a case with similar symptoms, without remark.

Dr. Adams, of Waltham, reported a case of a boy of 16, characterized by the same intense pain in the hip-joint, and down the

thigh to the knee. No tenderness on pressure. A good deal of œdema of thigh. Delirium on 5th or 6th day, and death on 8th or 9th. Autopsy showed two or three drachms of pus within capsule; abrasion, or slight ulceration, of cartilage near round ligament.

In relation to the result of treatment, Dr. Wyman mentioned the case of a boy of 12 years, in which there was the same agonizing pain in hip, with swelling and tenderness in groin over head of femur. The diagnosis was not verified, as the patient recovered after leeching and rest.

Dr. Wyman made some remarks upon cerebral rheumatism. In thirty years' practise, he saw no case. Within four years he has seen four or five cases. The disease appeared in France at about the same time it was first noticed in this country, and was described by Valleix, Trousseau, and others. Some indefinite allusions are made to such a disease in older writers.

In most instances, the disease runs the course of a mild case of inflammatory rheumatism. An undefined apprehension is often expressed by the patient. Suddenly, dulness and stupor occur, with rapid pulse, and febrile action, and the case goes on rapidly to a fatal termination.

A recent case offers another type. Sickness began with stiffness and pain in back of neck, and intense headache. Cerebro-spinal meningitis was feared until pain and swelling appeared in the joints. The case was painful, but went on favorably until the fourth week. Then the patient complained that she could not talk freely, that words did not come readily. Convulsions and delirium or mania followed. She is now slowly recovering.

Dr. Shute mentioned a case of mild rheumatism, at the Boston City Hospital, in which sudden mania occurred, and the patient died the next day. No autopsy reported.

Dr. Stone spoke of a case, at the Massachusetts General Hospital, of violent delirium or mania occurring in the course of rheumatic fever, with death of the patient in twenty-four hours. Nothing peculiar was found on post-mortem examination.

Mr. Miall reports in the *British Medical Journal*, the case of a woman who, in the seventh month of pregnancy, during a violent fit of coughing, fractured the tenth rib transversely, a little anterior to the tubercle.

Medical and Surgical Journal.

Boston: Thursday, May 4, 1871.

THE GAZETTE HEBDOMADAIRE AND THE AMERICAN AMBULANCE.

We are glad to welcome once more our old friend, the *Gazette Hebdomadaire;* we find it unchanged in appearance and character, notwithstanding its trials during the long siege of Paris.

The leading article in the revived journal gives an account of the ambulances or temporary hospitals organized by the representatives of different nationalities. First in the list comes the American ambulance, and we are glad of the testimony given by the Parisians themselves that the American ambulance has stood in great favor and has done a work of which we may well be proud. The experience gained by our own armies, and so thoroughly elaborated by them in the field and hospital work of our medical staff and of the sanitary commission, has been utilized during the past few months to the advantage of the suffering French soldiers. One question which has been satisfactorily decided by the French themselves has been the great advantage of employing tents in the treatment of the soldiers. Since the Exposition of 1867, when the subject was brought more fully to the attention of European nations by the admirable sanitary collection from America, it has been studied, and at the different hospitals of Paris, at Cochin and Beaujon, their utility has been recognized.

One of the first and most important advantages of the hospital tent is that it can be located at any point. In this respect the American ambulance has been well favored, situated as it is on the Avenue General Uhrich (formerly the Avenue de l'Impératrice), near the Bois de Boulogne. The tent employed is that suggested by Dr. Crane, who brought it to notice before the committee of the commission for relieving the wounded. It is square, about 15 feet long and 11 feet high in the centre. By the union of several single tents, a hospital of any size can be arranged. The bed

used is of the Tucker pattern. The tent is heated as it was in our army, by flues running beneath the floor from stoves outside. The ambulances employed for the transportation of the wounded, the same as employed in the War of the Rebellion, have excited admiration, both by the rapidity with which the wounded can be moved and by the superiority of their construction. The ambulance which, as is known, owes its existence to the energy of Drs. Evans and Crane, still remains under the direction of Dr. Swinburne. The apparatus and the methods of treatment are strictly American in character. The greatest attention has been given at all times to ventilation and disinfection. Thanks to the precautions used, there has not been in the American tents a single case of traumatic erysipelas, of typhoid, of hospital gangrene or pyæmia. The ambulance has received 263 wounded, including 126 cases of compound fractures. Of this total only 48 died, constituting a mortality of 18·25 per cent.

In conclusion, the *Gazette* considers the experience obtained from the American ambulance to be valuable in proving the great advantage of the hospital tents as constructed and carried on by our countrymen, and it attributes their success to the excellent means of transportation, the promptitude in affording relief, and the judicious selection of ground.

Lead and "Galvanized" Iron Water Pipes. *Messrs. Editors,*—The communication of Dr. Winsor, found in your Journal of April 13, conveys, whether intended or not, an unfair and erroneous impression, and I hope you will allow me space to correct it. Whatever construction may be put upon the language of the Spot Pond Water Commissioners as presented in their circular, it is certain they did not intend to recommend unqualifiedly or "virtually" lead pipes for water conduction. They speak of them as "comparatively safe," that is, compared with the "galvanized" iron pipes, and express a desire that the citizens of Melrose would remove such from their premises, even if lead has to be substituted. The chemists employed by the Board (J. R. Nichols & Co.) do not in the report presented in the circular, "virtually" recommend lead pipes, as stated by Dr. Winsor. They intended to convey the idea that, as the results of careful experiments made upon Spot Pond water in connection with the two kinds of pipes, lead is less objectionable than the galvanized iron. They state that under "ordinary conditions" lead is safe to conduct Spot Pond water, and this is true of the waters of most New England ponds. The waters of these open reservoirs among the hills are quite free from chlorides and nitrates, and generally hold in solution sufficient carbonic acid to change soluble oxides into insoluble carbonates, therefore the waters exert a protective influence by the formation of an insoluble coating of carbonate of lead upon the interior of the pipes. If this coating was not liable to be interfered with by local agencies, lead pipes would be "virtually" safe to conduct water from these ponds, and I should not hesitate to recommend them. But so long as this liability exists, however small the risk, they must be regarded as dangerous.

For a period of more than twenty years, the writer has made frequent and extended experiments upon waters brought in contact with lead, and these waters have been taken from ponds and open reservoirs in nearly all the New England and Northern States. In 1857, fourteen years ago, he published a paper in this Journal upon "local decomposition in lead aqueduct pipes," in which the results of a series of experiments upon Cochituate water were presented in detail. They coincided with those of Prof. Horsford and Dr. C. T. Jackson, the able chemists employed by the city Water Board, so far as relates to the general protective influence of the water, but it was shown that there was danger from local decomposition in service-pipes, and lead was detected in the water flowing into dwellings in various parts of the city. It was proved that local disturbances arose from change in the electrical condition of the pipes, twisted and bent by plumbers when placed in position; also that organic matters—leaves, mud and other vegetable *débris*—were capable of dissolving the coating of carbonate of lead and rendering pipes unsafe. In this communication, which may be seen by consulting files, the writer was emphatic in condemning lead pipes, and in no subsequent printed or verbal communication has he actually or "virtually" recommended them.

As regards the statements of Dr. Winsor concerning the safety of the "galvanized" iron pipes, which have appeared in this Journal in the form of reports, &c.,

little need be said beyond the bare expression of regret that such communications should have appeared at all. The question of the influence of zinc-impregnated water upon the health of individuals and families is of the gravest importance, and should not be discussed by one who has no experimental results or personal observations to offer, and who is unable to quote from a single credible or respectable authority. If Dr. Winsor was *required* to write or "report" on the subject, he could have given to his paper some value by consulting proper books and files of scientific journals, and presenting the results of experiments and observations made by others. If he had even opened the U. S. Dispensatory, a book presumed to be found in every doctor's library, he would have learned that the salts of zinc were regarded as poisonous many years ago. Prof. Bache says:—"The compounds of zinc *are poisonous*. The oxide of zinc, used in painting as a substitute for white lead, is said to be capable of producing a colic resembling that caused by lead and called *zinc colic*. It attacks workmen engaged in packing it in barrels, and yields to the remedies appropriate to the treatment of lead colic."

The old *Chemical Gazette* published an article in September, 1850, upon zinc poisoning, in which facts are presented of a startling character. The experiments of Dr. Witherbee and others with the salts of the metal upon animals, prove the oxide and chloride to be fully as dangerous as any of those of lead. The sad and fatal effects which in England followed from the use of milk and butter which had been in contact with zinc vessels, are significant facts which ought not to pass unheeded by careful, competent physicians. Disregarding the allusions to physicians, made by Dr. Winsor, who have with great care reported cases of zinc poisoning in this vicinity and in the Western States, I will simply state that several well-marked cases of zinc poisoning have come under my observation during the past year, and no one can reasonably doubt that a considerable number have suffered to a greater or less extent from the oxide and perhaps chloride of zinc brought to them in water which passes through the so-called "galvanized" iron pipes. To me it is a matter wholly incomprehensible that a physician in respectable standing should be willing to state, over his own signature, that the filthy, unscientific zinc-washed pipes are proper for water conduction, that "no safer available material for water pipes than galvanized iron is known to us." And this is said after "virtually" admitting that all the zinc is dissolved from the pipes by the water and disappears in a few weeks, and that the carbonate and oxide of the metal are largely found in the water employed in the culinary departments of dwellings.

JAS. R. NICHOLS, M.D.

PLAGIARISM.—We do not mind having short articles, items of information or even Editorial matter filched from our columns, as is constantly happening, without any notice of our ownership in the case; but when a periodical having the standing which *Appleton's Journal* boasts, copies bodily from our columns an entire article without giving credit for it, we feel that it is time for Editorial remonstrance.

Our JOURNAL for March 16 contained an essay on the Climate of the United States, and its Effects on Habits of Life and Moral Qualities. It was translated for the JOURNAL by a literary non-professional gentleman, a friend of M. Desor, and was accompanied by an explanatory letter. The article has been highly spoken of in various directions, and we are glad to see that it has attracted the attention of the Messrs. Appleton; but we regret that they should have allowed themselves to copy it verbatim without credit.

VIENNA MEDICAL EDUCATION.—We are requested by Dr. Lincoln to make the following additions to his article, which appeared in the JOURNAL of last week:—

A. The Professors' regular salaries commence at 2200 gulden, with an increase every five years of 200, until they reach 3000 gulden. Four hundred are allowed, in addition, for Quartiergeld, or rent. Some salaries are considerably larger than the above, the receivers of them having made their own special stipulations with the authorities, at the time they were called to their Professorships.

B. The Examiners in the *Rigorosa* are assisted by the Deans of the Medicinisches Professoren-Collegium and the Med. Doctoren-Collegium.

C. If a student is passed by a *majority* of the *Examining Professors* he has to make up at a subsequent examination only those branches in which he is marked deficient. Otherwise, he makes up *the whole*.

D. Only the professors have votes in deciding upon a candidate's merits. They do not assemble and discuss the matter, but the two deans settle it by a simple reference to the written record made by each professor, the record not being numerical, but categorical.

E. It might seem a truism; yet it is not superfluous to say that the more German one knows, the more medicine he can learn here. Vienna is not a good place to commence the study of German. Besides this, there are a number of small Universities, like those of Leipzig, Halle, Würzburg, where the young physician can study German, and at the same time enjoy the advantages of a good clinic, thus testing from day to day his attainments in the language. Two or three months thus spent will be very well spent.

Remarkable Effects of Hydrate of Chloral. *Messrs. Editors,*—I notice in the issue of your Journal of March 16th a report of a "case of convulsions in a child of four months, treated successfully by hydrate of chloral." Hydro-chloral may be an excellent remedy for convulsions, and perhaps the gentleman from Lynn does not "state the case too strongly when he says the child's life was saved by the remedy," but does he really mean to say that the chloral made the child of *four months "talk"?*

This case of remarkable precociousness is only exceeded by another article in the number issued Feb. 23d, which is supposed to have been produced by a surgical operation "for a congenital malformation of the genital organs," on a child five months old. It appears from the report of the case, as copied from the Philadelphia *Medical Times*, that when this child became two years old, the organ presented a natural appearance, and, as in the case of most children of his age, it had a slight tendency to curve downwards while in a *flaccid* condition, "but when in a state of *erection (?)* it became straight and assumed a position at right angles to the body." G. W. R.

St. Albans Village Medical Society.—The physicians of St. Albans, Vt., have formed a Medical Society, for mutual improvement, of which Dr. John Branch is President, and Dr. S. S. Clark Secretary. At the meeting for organization, the President delivered an address; we have space for a brief extract only:—

"A man's standing in his profession is measured very much by the company he keeps; if he keeps no company he is nobody. A diploma is evidence of the high position he once arrived at, but it tells us nothing of the present qualifications of its possessor. In the Massachusetts State Medical Society none are admitted upon the strength of it, not even from their own schools. Every candidate for admission must pass a satisfactory examination before their Board of Censors, without which none can be received, for it is not what a man has been but what he is.

"There is no tribunal by which a diploma may be taken from an unworthy possessor, but the names of those who by isolation have become grossly ignorant, or by indulging in a beastly appetite, have been guilty of habitual intoxication or any immorality which would disqualify them for the successful practice of their profession, would be stricken from the records of any Society.

"As a diploma is prima facie evidence of what a man has been, so a record of membership in a Medical Society is of what he is now.

"Association is now considered so indispensable that it has been proposed, and will sooner or later be carried into effect, that no diploma will be considered effectual until the possessor has become a member of some Medical Society, and, indeed, such is virtually the case in many places and practically so in Massachusetts, as we have already seen.

"Reading cannot be dispensed with, but it is a poor substitute for association in keeping up with the times. Of course, it is desirable that every practitioner in this village, who is a graduate of any respectable school, should become a member of this Society. Others we could not get if we wished them, for there is no danger of our meetings ever being polluted by the presence of the vile pretenders of our art, whose secret nostrums are kept in darkness, for they shun society as a burglar does the day. In former times, if a man claimed to be a Roman citizen he was respected through the world, and when a man proclaims himself a member of a Medical Association we never feel ourselves in the presence of a quack."

There is a dash of genuine sentiment of the right sort in an article by Dr. S. P. Crawford, Collegeville, Cal., in the Nash-

ville Journal of Medicine and Surgery, which induces us to copy his closing paragraph. Such are the pioneers who, in the smaller towns and villages throughout the length and breadth of our land, are ever busy in lending a helping hand to the sick and suffering. A man of this sort would be lost in a city drug store; certainly some of us would be equally at a loss how to proceed, were we in his place:—

"My formula for the administration of the sub. carb. ferri is, no doubt, a little *informal.* I put from a half-ounce to an ounce (according to the quantity I want taken at a dose) in a six-ounce bottle; pour in simple syrup to fill the bottle, and 'shake well before taken.' If the powder and syrup are too thick, add a little water.

"I hope my metropolitan brothers will not laugh at this, because there are so many more elegant forms for the administration of this remedy. Recollect that I am my own apothecary, have always been on the outpost, standing picket, as it were, with little of the appliances belonging to medicine, and cannot supply myself with all the elegant forms for the administration of drugs. I can have but few remedies, and they must be reliable. It matters not how they taste, or how they go down, so they *go* down. I cannot send prescriptions to the drug-man to have them spiced and flavored to taste. I never write prescriptions; the fact is, I don't know how. I have no *carminatives,* 'to expel wind, either up or down, to suit the *fancy* of the patient.' I preside over my own 'doctor-shop,' *otium cum dignitate,* if the jars and bottles do sometimes get full of flies and spiders. My position is one of labor—brain labor, nerve and muscle labor. Like the farmer on a small scale, that has to work in the field, barnyard, garden, potato-patch—cut wood, do *chores,* rock the baby, and go to mill, besides. So I have to be chemist, druggist, apothecary, obstetrician, dentist, surgeon, *corn* and *cancer* doctor, all on the same day. Who wouldn't be a country doctor? But, *satis superque.*"

Dr. Joseph Jones, of New Orleans, Professor of Chemistry in the University of Louisiana, and formerly surgeon in the Confederate States Army, has devoted the past fifteen years to the investigation of malarial and other diseases, including the diseases of the Confederate Army during the War of the Rebellion. He will lay his Medical and Surgical Memoirs before the profession so soon as a sufficient number of subscribers has been obtained.

Perchloride of Iron and Manganese in Necrosis, Fistulous Sinuses, and Hydrocele.—Prof. Marcacci, in an essay on this subject, in the *Revista Scientifica di Siena,* arrives at the following conclusions: 1. Perchloride of iron and manganese, injected into fistulous sinuses, destroys the pyogenic membrane, modifies the state of the walls, and favors cicatrization. 2. In necrosis, it acts on the confines of the living bone, stimulating its vessels; so that the detachment and separation of the dead bone are facilitated by the formation of new vessels in the living. 3. In hydrocele, it soon modifies the inner surface of the tunica vaginalis, which becomes filled with plastic exudation, attended with more or less inflammation, according to the quantity and strength of the injection used. 4. It is not necessary that the tunica vaginalis should be distended by the injection; it is sufficient that the liquid be brought into contact with all parts of the membrane. 5. Very little pain is produced by the contact of the solution, but it is not the less efficacious. 6. A weak solution is sufficient, which should be kept in two minutes. 7. In seven cases of hydrocele in which the injection was used, hard œdema followed, but was not a serious complication.—*Brit. Med. Jour.*

Dr. Brown-Sequard (*London Lancet,* p. 486, Sept. 24), at the recent meeting of the British Association for the Advancement of Science, reported the results of some interesting experiments on the brains of different animals, tending to show that the right side of the brain was more important for organic life than the left side, and that, although the two sides of the brain were precisely alike when the animals were born, by greater development of the activity of one side it afterwards became quite different from the other. He showed also that epilepsy induced in the guinea-pig could be transmitted to its offspring.—*Philadelphia Med. Times.*

It is stated that Baron Liebig has entirely recovered his health and resumed his lectures in the University of Munich. His disease was successive attacks of boils.—*New York Med. Jour.*

Medical Miscellany.

APPOINTMENT.—Dr. William H. H. Hastings, of Boston, has been appointed by the Governor a coroner for the County of Suffolk.

MIDDLESEX NORTH DISTRICT MEDICAL SOCIETY.—At the annual meeting of this Society, the following officers were elected for the ensuing year:—*President*, Gilman Kimball, Lowell. *Vice President*, Levi Howard, Chelmsford. *Secretary*, Geo. H. Pillsbury, Lowell. *Treasurer*, N. B. Edwards, N. Chelmsford. *Curator and Librarian*, Franklin Nickerson, Lowell. *Commissioner on Trials*, John O. Green, Lowell. *Standing Committee*, John W. Graves (Lowell), Hanover Dickey (Lowell), John H. Gilman (Lowell). *Councillors*, Chas. A. Savory, Walter Burnham, Joel Spalding, Nathan Allen, William Bass, of Lowell, and Norman Smith, of Groton. *Censors*, Daniel P. Gage, Moses G. Parker, Lorenzo S. Fox, Charles B. Sanders, Ezra B. Aldrich, of Lowell. GEO. H. PILLSBURY.

EFFECTS OF FORMER SYPHILIS UPON WOUNDS.—Dr. John Merkel, of Nürnberg, relates three cases in which syphilitic symptoms made their appearance when cicatrization was almost complete. One case was one of hydrocele, tapped and treated by Beck's method of incising the tunica vaginalis and fixing it by suture to the external skin. The two others were gun-shot wounds. The latent syphilis did not interfere in the least with the progress of healing; but just when the solutions of continuity were upon finally closing, either eruptions appeared over the whole frame, or unmistakable syphilitic tubercles formed on the margins of the wounds. The author ordered mercurial frictions with the best effects.—*Lancet.*

THE following incident happened in the court room here [says Dr. Dan. S. Burr, of Binghamton, N. Y.] the other day, and may be of interest to such of your readers as are students of comparative anatomy:—

The case in point was this:—Mr. A. sold a colt, as a gelding, to Mr. B., which colt had had but one testicle removed, the other remaining within the cavity of the abdomen. The veterinary surgeon who had castrated the animal was sworn, and, on his cross examination, stated the following interesting features in the anatomy of the horse:—

Atty.—What are, and where are varicose veins found?

Witness.—I don't know, but I can tell where the bellicose veins are.

Atty.—Where are they?

Witness.—Close to the belly.

Atty.—Where is the scrotum?

Witness.—I am not quite certain, but I think that it is the film that covers the teeth during infancy.

Atty.—Have you ever made any examinations in the abdominal region?

Witness.—No; all of my examinations have been made in Broome County.

Atty.—That is sufficient.—*N. Y. Med. Gazette.*

"FIR KRAMPS."—Here is a prescription written by a New York "fasition," and which is vouched for by the *Sun* as genuine:—

℞. Fir Kramps.
Tinct. Kamfire, won ounce.
Tinct. Lodenum, a little.
Tinct. Hot Drops, a few drops.
Tinct. Kyan pepar, 5 cents worth.

Kloreform, a little, but not much, as it is a dangerous medicine.—*Indiana Jour. of Medicine.*

☞ READERS will notice in the advertising sheet today that it is the *Old* Series of the JOURNAL, and not the New Series, of which the publishers are in want of Vols. IV. and VI.

TO CORRESPONDENTS.—Communications accepted:—Report of an Epidemic of Influenza.—Lead and Galvanized Iron Water-pipes.—Duhring's Study of Dermatology.

PAMPHLETS RECEIVED.—Medicine as an Art and as a Science. An Address before the Massachusetts Homœopathic Medical Society. By Daniel Holt, M.D., Lowell. Pp. 39.—Proceedings of the State Medical Association of Arkansas, at Little Rock, November, 1870, with the Constitution, By-Laws and Code of Ethics. Pp. 37.—Catalogue of Dental Furniture, Instruments, Implements, and Materials, for sale by Codman & Shurtleff, Manufacturers, Importers, Wholesale and Retail Dealers, 13 and 15 Tremont Street, Boston. Pp. 100.—Annual Report of the Commissioners of Quarantine, to which is annexed the Annual Report of the Health Officer of the Port of New York. Transmitted to the Legislature Feb. 7, 1871. Pp. 32.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending April 29, 1871.

Cities and Towns.	*No. of Deaths.*
Boston	117
Charlestown	7
Worcester	15
Lowell	16
Milford	6
Chelsea	5
Cambridge	13
Salem	6
Lawrence	11
Springfield	5
Lynn	13
Gloucester	4
Fitchburg	3
Newburyport	7
Somerville	4
Fall River	13
Haverhill	3
Holyoke	3
	251

Prevalent Diseases.	
Consumption	63
Pneumonia	26

Lowell reports two deaths from smallpox.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday April 29th, 117. Males, 57; females, 60. Accident, 1—abscess, 1—apoplexy, 2—bronchitis, 4—inflammation of the brain, 3—congestion of the brain, 3—disease of the brain, 1—consumption, 32—convulsions, 1—croup, 1—debility, 6—diarrhœa, 1—dropsy, 1—dropsy of the brain, 5—epilepsy, 1—scarlet fever, 1—typhoid fever, 4—gastritis, 1—disease of the heart, 7—hæmorrhage, 1—insanity, 1—intussusception, 1—disease of the liver, 2—congestion of the lungs, 2—inflammation of the lungs, 6—marasmus, 5—old age, 1—paralysis, 1—premature birth (one case of triplets), 6—scalded, 2—syphilis, 1—scrofula, 1—disease of the stomach, 1—unknown, 8.

Under 5 years of age, 40—between 5 and 20 years, 10—between 20 and 40 years, 30—between 40 and 60 years, 21—above 60 years, 16. Born in the United States, 82—Ireland, 24—other places, 11.